

### A New Self-Contained and Combination Sand-Blast.

In many instances, it is inconvenient to be obliged to fit up a sand-blast with a lot of piping and in order to obviate this annoyance, a new combination sand-blasting outfit has recently been placed on the market. This outfit is herewith illustrated in Fig. 1 and is very compact and complete, including the sand-

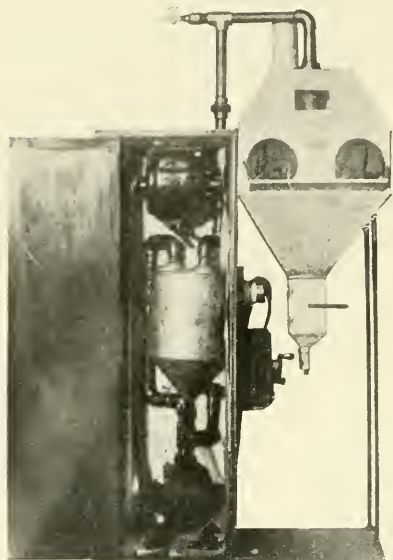


Fig. 1. The New "Leiman" Self-Contained Sand-Blast Machine.

blast proper, blower and pipe connections. As will be seen, the blower and motor are located in the box at the side of the sand-blast to which the latter is fastened. This box has a door which may be closed while the machine is in operation, thereby protecting it from dust and dirt. The sand-blast hood is equipped with an electric bulb, so that the actual turning on of the current for starting the machine, not only starts the blower and sand-blast, but also lights up the interior of the machine so that the work may easily be seen, no matter how dark the room may be in which the machine is situated.

This novel sand-blast is manufactured by Leiman Bros., 62 John St., New York City, who have been manufacturing sand-blasts and blowers for the past twenty years. This machine is equipped with their ingenious automatic, continuous feed sand-pipe by means of which the same sand is used over and over again,

so that a half pail of sand will be sufficient for operating from several days to a week, according to the kind of work done.

This sand-blasting outfit should find a large field among platers, manufacturing jewelers, and metal manufacturers, and as they are made in four or five sizes, they are well adapted to all kinds of establishments. The sand-blast is the ideal method of producing a surface for electroplating and is now extensively used for such a purpose. It is also valuable for removing sand from brass castings and for producing a matt or dead surface on metals in place of the uncertain matt dip, and for this purpose has the distinct ad-



Fig. 2. The New "Leiman" Pressure Blower. The Smallest Size Ever Made.

vantage that it can be used on large or small work, while the matt or dead dip is limited to comparatively small work.

Leiman Bros., have also recently placed a small pressure blower upon the market which, it is believed, is the smallest ever made. This blower is used for work requiring a very small volume of air. It is shown in Fig. 2.

### The Electrodeposition of an Alloy of Silver and Cadmium.

As considerable interest seems to be displayed at the present time in regard to the electrodeposition of an alloy of silver and cadmium, a few remarks upon the subject may be opportune. While this subject at first seems attractive, a realization of the conditions which must be met and the difficulties which are confronted in depositing the two metals simultaneously, will surely result in a different view of this apparently attractive process.

The electrodeposition of an alloy of silver and cadmium was first brought out in 1892 by S. O. Cowper-Coles of London, the well known English inventor. He was granted a patent (British Patent 1,391 of 1892) upon the process and a company was formed to use it. Flat-ware was plated by it and it was believed